

**PASSAIC RIVER STUDY AREA**  
**POTENTIALLY RESPONSIBLE PARTIES**  
**SEPTEMBER 1993**

SDMS Document



84610

**NAME OF PRP:**

City of Newark Police Firing Range

**FACILITY ADDRESS:**

294 Avenue P  
Newark, New Jersey

**LOCATION:**

River Mile: -0.05  
Reference Map Number: 20

**PROCESSES UTILIZED:**

Police training and weapons firing range.

**DISCHARGE:**

- 04/11/89 - Soil sampling conducted in November of 1988 at the City of Newark Police Department's open air firing range found that the site was contaminated with PCBs, petroleum hydrocarbons, heavy metals and base neutral compounds. Composite sampling also revealed the presence of dioxin contamination. The site is located adjacent to D&J Trucking Company and Plum Creek, a tributary of the Passaic River. [04/11/89 Letter from City of Newark to NJDEP.]

**PROBABLE HAZARDOUS SUBSTANCES:**

- Dioxin
- Heavy metals
- PCBs
- Base neutral compounds

**RIVER SAMPLES:** Sample 99, collected 1200 feet across the Passaic River from the Plum Creek outfall, contained significant concentrations of base neutrals, metals, PCBs, petroleum hydrocarbons and volatile organics. Both total dioxins and total furans were also detected.

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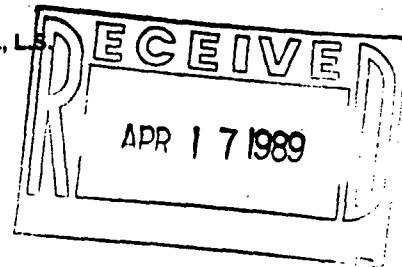
Sharpe James  
Mayor

07-14390

Department of Engineering

920 Broad Street,  
Newark, New Jersey 07102  
(201) 733-8520

Alvin L. Zach P.E., L.S.  
Director



April 11, 1989

Mr. Christopher Daggett, Commissioner  
New Jersey Department of Environmental Protection  
401 East State Street  
CN 402  
Trenton, New Jersey 08625

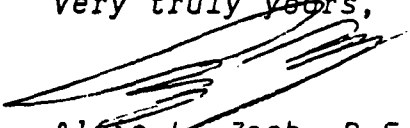
Dear Commissioner Daggett:

This is to advise you that the City of Newark has discovered soil contamination on a 3 acre City-owned parcel known as the Police Academy site on Avenue P (Block 5060, Lot 150) in Newark, New Jersey. The contamination was discovered through soil sampling that was conducted as part of a preconstruction environmental site investigation. This evaluation found that the site, which is currently used as an open air shooting range by the Newark Police Department and is proposed for development as a new police academy, is contaminated with petroleum hydrocarbons, heavy metals and base neutral compounds. In addition, one composite sample contained two of the less toxic forms of dioxin at concentrations above 1 ng/g. A report prepared by our consultant, Dresdner, Robin & Associates, is enclosed which describes the site evaluation and its findings.

Based on the findings of the site evaluation, the City has initiated a supplemental sampling program to better characterize the site conditions. The City has also ceased using the shooting range pending the results of additional sampling and evaluation.

It is the City's intent to develop a remedial plan for the site that will allow construction of the new Police Academy to proceed. I request that the New Jersey Department of Environmental Protection assist the City in formulating an appropriate remedial approach for the site. Please have a project officer contact me so that we can initiate this process.

Very truly yours,



Alvin L. Zach, P.E., L.S., Director  
Department of Engineering

ALZ:cmk

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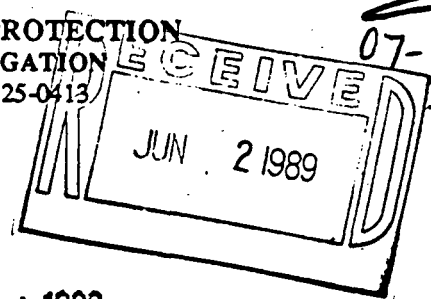
cc: Sharpe James, Mayor  
Henry Martinez, Council President  
Richard Monteilh, Business Administrator  
Glenn Grant, Corporation Counsel  
George McCann, Assistant Commissioner  
~~Anthony Cavallaro, Bureau Chief, Motor Vehicle~~

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*please make a file  
for it  
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State of New Jersey  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF HAZARDOUS SITE MITIGATION  
401 E. State St., CN 413, Trenton, NJ. 08625-0413  
(609) 984-2902  
Fax # (609) 633-2360



Anthony J. Farro  
Director

MAY 31 1989

Claude H. Coleman, Director  
Newark Police Department  
31 Green Street  
Newark, NJ 07101

Dear Director Coleman,

This letter is in response to an inquiry from Lieutenant Andrew Turner of your Department. On Wednesday, 10 May 1989, I was contacted by Lt. Turner regarding the recently discovered dioxin soil contamination at the Ave P. Firing Range (site of proposed police academy).

Specifically, in light of the dioxin contamination, Lt. Turner requested guidance on handling and removal of the police department trailers on site which are used for offices, classrooms and storage. Lt. Turner asked that I send recommendations directly to you.

I recently reviewed the Environmental Site Evaluation Report, dated February 1989, prepared by Dresdner, Robin and Associates (DRA) for the City of Newark Department of Engineering. The report presented chemical analysis results of soil samples collected in November 1988 from 7 test pits and 5 surface soil locations across the site. The results indicated that the subject site is contaminated with significant concentrations of total petroleum hydrocarbons and semi-volatile organic compounds. In addition, two areas on site revealed elevated concentrations of PCB compounds. To a less extent, heavy metal and dioxin/furan contamination was discovered.

Discussion of Dioxin/Furan Results

During the November 1988 sampling, soil from 6 sampling locations on site was composited into one sample and analyzed for total dioxin/furan compounds. The composite sample revealed the presence of 3.0 parts per billion (ppb) of total hepta and octa chlorinated dibenzo furan compounds and 14.2 ppb of total hepta and octa chlorinated dibenzo dioxin compounds. The most toxic form of dioxin, 2,3,7,8-tetrachloro dibenzo-p-dioxin (2,3,7,8-TCDD) was not found in this sample. The hepta and octa forms of dioxins/furans found on site are considered approximately 1000 times less toxic than the "tetra" version.

The NJDEP soil action level for 2,3,7,8-TCDD is 1 ppb. Specific soil action levels do not currently exist for the hepta and octa forms of dioxin and furan. These compounds are considered much less toxic than 2,3,7,8-TCDD, therefore concentrations of up to 1000 ppb (total hepta and octa dioxin/furan) are not considered a significant health threat. The dioxin/furan results reported by DRA cannot be directly compared to these action levels because the collected sample is comprised of soil from several locations on site. Action levels are used for comparison to actual surface soil concentrations, such as those obtained from single-location samples. The composite sample provides general information on site contamination, however, the chemical concentrations reported are considered lower than the actual soil concentrations at one or several of the locations sampled.

To obtain a more accurate assessment of the dioxin/furan contamination on site, DRA is planning to collect additional single-location samples across the site. The results from these samples will be compared to the action levels discussed above.

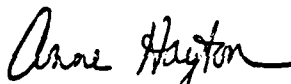
#### Recommendation on Trailer Removal

I was informed by Lt. Turner that because of the additional sampling required, the Newark Police Department would like to move the trailers to another location to resume training classes without additional interruptions. If the trailers are removed, the following cleaning procedures are recommended prior to removal:

- Wash out the inside of trailers (mop floors, wash down table/counter tops, etc.)
- Wash the outside of trailers by either steam cleaning or cleaning with non-phosphate detergent, scrubbing under carriage and tires with long-handled brushes. Wash waters from both inside and outside of the trailers may be discharged on site, away from the trailers and transportation routes, in a manner which prevents surface runoff.
- Personnel conducting the trailer cleaning must wear appropriate protective clothing such as coveralls, water proof gloves, over boots, etc., and should make an effort to reduce contact with the wash water.

If you have further questions I can be reached at (609) 984-3068.

Yours truly,



Anne G. Hayton  
Bureau of Environmental Evaluation  
and Risk Assessment

HS69/pw

cc: Alvin Zach, Director  
Newark Department of Engineering  
Anthony Cavalier, Bureau Chief, Metro Office, NJDEP  
Kenneth Kloo, Bureau of Site Assessment, NJDEP

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